

09/743003



Customer No.: 22186

Attorney Docket No. 1052.039

PATENT

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below-named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first, and sole inventor (if only one name is listed below) or an original, first, and joint inventor (if multiple names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled **A PREDISTORTER**, the specification of which is being filed under the above-identified Attorney Docket Number.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by an amendment, if any, specifically referred to in this oath or declaration.

I acknowledge the duty to disclose all information known to me that is material to patentability as defined in Title 37, Code of Federal Regulations, 1.56(a).

PRIORITY CLAIM

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d), or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

| <u>Prior Foreign Application(s)</u> | | <u>Priority</u> <u>Not Claimed</u> |
|-------------------------------------|-----------------------------------|---|
| <u>PCT/GB99/02110</u> (Number) | <u>PCT</u> (Country) | <u>02 July 1999</u> (Day/Month/Year Filed) [] |
| <u>9814391.0</u> (Number) | <u>Great Britain</u> (Country) | <u>02 July 1998</u> (Day/Month/Year Filed) [] |

Andrew Ref.: 776

Customer No.: 22186

Attorney Docket No. 1052.039

I hereby claim the benefit under Title 35, United States Code, 119(e) of any United States provisional application(s) identified below:

None

I hereby claim the benefit under Title 35, United States Code, 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, 112, I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, 1.56(a) which became available between the filing date of the prior application and the national or PCT international filing date of this application:

None

POWER OF ATTORNEY

As a named inventor, I hereby appoint the following attorneys jointly and each of them severally, with full power of substitution, delegation, and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent and Trademark Office connected therewith:

5

| | |
|-------------------|------------------------|
| Steve Mendelsohn | Reg. No. <u>35,951</u> |
| Ian M. Hughes | Reg. No. <u>41,083</u> |
| Steve R. Petersen | Reg. No. <u>31,287</u> |
| Yuri A. Gruzdkov | Reg. No. <u>50,762</u> |
| Michael L. Craner | Reg. No. <u>50,127</u> |

I hereby direct that all correspondence and telephone calls in connection with this application be addressed to:

Steve Mendelsohn
Mendelsohn & Associates, P.C.
1515 Market Street, Suite 715
Philadelphia, Pennsylvania 19102
Telephone: (215) 557-6657
Facsimile: (215) 557-8477
Customer No.: 22186

Andrew Ref.: 776

Customer No.: 22186

Attorney Docket No. 1052.039

DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

SIGNATURES

1-DD
Full name of 1st inventor: Peter B. Kenington

Inventor's signature

PB Kenington

Date

10th February 2004

Residence: Chepstow, United Kingdom

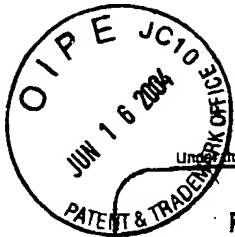
GBX

Citizenship: United Kingdom

Post Office Address:

Trap Farm, Devauden
Chepstow NP16 6PE, United Kingdom

Res'd PCT/PTO 16 JUN 2004⁰⁰⁴
09/743003



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**POWER OF ATTORNEY
and
CORRESPONDENCE ADDRESS
INDICATION FORM**

| | |
|-------------------------------|---------------------|
| Application Number | (see attached list) |
| Filing Date | (") |
| First Named Inventor | (") |
| Title | (") |
| Art Unit | (") |
| Examiner Name | (") |
| Attorney Docket Number | (") |

I hereby appoint:

☒ Practitioners at Customer Number:

OR

Practitioner(s) named below:

| Name | Registration Number |
|------|---------------------|
| | |
| | |
| | |
| | |
| | |

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please recognize or change the correspondence address for the above-identified application to:

☒ The above-mentioned Customer Number:

OR

☐ The address associated with Customer Number.

OR:

| | | | | | |
|--------------------------|-------------------------|-------|--|-----|--|
| <input type="checkbox"/> | Firm or Individual Name | | | | |
| Address | | | | | |
| Address | | | | | |
| City | | State | | Zip | |
| Country | | | | | |
| Telephone | | Fax | | | |

am the!

☐ **Applicant/Inventor.**

☒ Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

SIGNATURE of Applicant or Assignee of Record

| | | | |
|-----------|----------------------------------|-----------|--------------|
| Name | James F. Petelle, Vice President | | |
| Signature | <i>James F. Petelle</i> | | |
| Date | 4 Aug. 2003 | Telephone | 708-873-2570 |

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☒ Total of 11 forms are submitted.

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

BEST AVAILABLE COPY

Rec'd PCT/PTO 16 JUN 2004

002

09/743003

PTO/SB/02 (06-03)

Approved for use through 11/30/2005. OMB 0851-0035
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**REVOCATION OF POWER OF
ATTORNEY and APPOINTMENT OF
NEW POWER OF ATTORNEY**

| | |
|------------------------|---------------------|
| Application Number | (see attached list) |
| Filing Date | () |
| First Named Inventor | () |
| Art Unit | () |
| Examiner Name | () |
| Attorney Docket Number | () |

I hereby revoke all previous powers of attorney given in the above-identified application:

☒ A Power of Attorney is submitted herewith.

OR

☐ I hereby appoint the practitioners at Customer Number:

22186

PATENT TRADEMARK OFFICE

☒ Please change the correspondence address for the above-identified application to:☒ The address associated with
Customer Number:

22186

PATENT TRADEMARK OFFICE

OR

☐ Firm or
Individual Name

Address

Address

City

Country

State

Zip

Telephone

Fax

I am the:

☐ Applicant/Inventor.☒ Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)**SIGNATURE of Applicant or Assignee of Record**

Name James F. Petelle, Vice President

Signature *James F. Petelle*

Date 4 Aug, 2003

Telephone 708-873-2570

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☒ Total of 11 forms are submitted.

This collection of information is required by 37 CFR 1.36. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

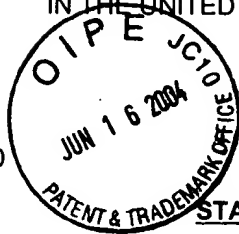
If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

BEST AVAILABLE COPY

Mendelsohn & Associates, P.C.

| Application No. | Filing Date | First Named Inventor | Title | Group Art Unit | Examiner Name | Attorney Docket No. | MA Ref. |
|-----------------|-------------|----------------------|--|----------------|------------------|----------------------|----------|
| 09/913,368 | 12/17/2001 | Peter Kenington | Signal Processing Means | 2817 | Not yet assigned | 46309/262012 | 1052.028 |
| 10/088,424 | 08/14/2002 | Peter Kenington | Lineariser for a Signal Handling Apparatus | 2816 | Not yet assigned | 46309/271492 | 1052.029 |
| 09/623,576 | 02/26/2001 | Peter Kenington | Feed Forward Amplifier | 2817 | Henry Choe | 46387/247272 | 1052.030 |
| 10/148,995 | 10/29/2002 | Peter Kenington | Control Scheme for Distortion Reduction | 2817 | Not yet assigned | 46309/27400 | 1052.031 |
| 10/148,869 | 09/30/2002 | Peter Kenington | Distortion Reduction | 2817 | Not yet assigned | 46309/274399 | 1052.032 |
| 09/623,646 | 03/02/2001 | Peter Kenington | Predistorter | 2816 | Not yet assigned | 46387/247138 | 1052.033 |
| 10/203,505 | 11/26/2002 | Peter Kenington | Amplifier Arrangement | 2817 | Not yet assigned | 46309/277116 | 1052.035 |
| 10/030,206 | 12/31/2001 | Peter Kenington | Reducing Distortion of Signals | 2634 | Not yet assigned | 46309/268337 (23890) | 1052.036 |
| 10/203,049 | 12/09/2002 | Steven Richard Ring | Distortion Reduction | 2817 | Not yet assigned | 46309/276964 | 1052.038 |
| 09/743,003 | 12/29/2000 | Peter Kenington | A Predistorter | N/A | Not yet assigned | 46309/251562 | 1052.039 |

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Our Ref.: 1052.039Re: Attorney Docket No. 46309/251562Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450STATEMENT UNDER 37 CFR 3.73(b)Applicant/Patent Owner: Andrew CorporationApplication No./Patent No.: 09/743,003 Filed/Issued Date: 12/29/00Entitled: A PredistorterAndrew Corporation

(Name of Assignee)

Corporation

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

States that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title, and interest.
The extent (by, percentage) of its ownership interest is _____ %

In the patent application/patent identified above by virtue of either:

- A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel ____, Frame ____, or for which a copy thereof is attached.

OR

- B. ☒ A Chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: Inventor To: Wireless Systems International Limited
for which a copy thereof is attached.
2. From: Wireless Systems International Limited To: Andrew Corporation
for which a copy thereof is attached.
3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel ____, Frame ____, or for which a copy thereof is attached.

- ☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☒ Copies of assignments or other document in the chain of title are attached.
[Note: A separate copy (i.e., the original assignment document or a true copy of the original documents) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Respectfully submitted,

Date: 6/14/04
Customer No. 22186
Mendelsohn & Associates, P.C.
1515 Market Street, Suite 715
Philadelphia, Pennsylvania 19102

Steve Mendelsohn
Steve Mendelsohn
Registration No. 35,951
Attorney for Assignee
(215) 557-6657

ASSIGNMENT

The undersigned Inventor, PETER KENINGTON, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, do hereby sell, transfer, and assign to the Assignee, wireless Systems International Limited a corporation organized and existing under the laws of Great Britain, and having a place of business at Innovation House, Bristol Business Park, Coldharbour Lane, Bristol BS16 1EJ, Great Britain, the full, exclusive, and entire right, title, and interest for the territory of the United States of America, in and to the invention entitled A PREDISTORTER as described and claimed in the International Application PCT/GB99/02110, entered into the national phase in the United States on December 29, 2000, and assigned Application No. 09/743,003; and the full, exclusive and entire right, title, and interest in and to said application, in and to any divisions, continuations, reexaminations, and reissues thereof; and I hereby request the Commissioner of Patents and Trademarks of the United States of America to issue said Letters Patent to the Assignee, for its interest, for the sole use of the Assignee and its successors, assigns and legal representatives, as fully and entirely as the same would have been held by me had this assignment not been made;

AND, for the same consideration, I agree to sign all lawful papers, execute all division, continuing, reexamination, reissue and other applications, make all assignments and rightful oaths, and generally do everything possible to the Assignee, its successors, assigns, and nominees, to obtain and enforce proper protection for all said inventions and improvements in the United States of America.

Date Signed:

26th Feb 2001

PETER KENINGTON

P.B. Kenington

Docket: 46309/251562
(23890)

DATED 10th JULY

2002

PARTIES

- (1) Wireless Systems International Limited (company number 03005432) whose registered office is at Innovation House, Bristol Business Park, Coldharbour Lane, Bristol BS16 1EJ acting by its Joint Administrators Cedric Marsden Clapp and Andrew Martin Sheridan (*"the Assignor"*); and
- (2) Andrew Corporation of 10500 West 153rd Street, Orland Park, Chicago, IL, USA 60462-3099 (*"the Assignee"*).

BACKGROUND

- (A) The Assignor is the proprietor of the Intellectual Property Rights and the Know how.
- (B) The Assignor has agreed with the Assignee to assign the Intellectual Property Rights and the Know how to the Assignee on the terms and conditions of this Agreement.

AGREED TERMS**1 Definitions and Interpretation**

- 1.1 In this Agreement the words below have the meaning next to them unless the context requires otherwise:

the Administrators Cedric Marsden Clapp and Andrew Martin Sheridan both of Baker Tilly, 55 Queen Square, Bristol BS1 4LH

Intellectual Property Rights all intellectual property world-wide associated with the trading and research activities of the Assignor, including, but not limited to, all patents (whether registered, pending or applied for and including but not limited to those listed in Schedule 1 hereto, and all corresponding worldwide counterparts), moral rights, database

BEST AVAILABLE COPY

rights, trade marks (registered and unregistered and including but not limited to those listed in Schedule 1 hereto, and all corresponding worldwide counterparts), logos, domain names, service marks, registered and unregistered designs, copyright, drawings, website and content, trading business name(s), technical or commercial information, computer programs and/or licences, enabling and/or maintenance contracts, rights to protection and applications for registration in connection with any of the above,

Know how

any and all information, data, drawings, plans, specifications, formulae, algorithms, component lists, instructions, manuals, experience, brochures, catalogues and process descriptions, prototypes, and schematics which are owned or controlled either solely or jointly by the Assignor including but not limited to the contents of the Pragmax System and any employee research records in the form of workbooks, notebooks or electronically stored notes in so far as the Assignor has such notes and records in its possession at Completion, as defined in the Asset Purchase Agreement completed by the parties on the same date as this Assignment.

2 Consideration

- 2.1 In consideration of the payment of the sum of £2,039,000.00 paid by the Assignee to the Assignor (receipt of which the Assignor acknowledges), the Assignor assigns to the Assignee such right, title and interest as the Assignor may have in and to the Intellectual Property Rights and the Know how,

Chen

BEST AVAILABLE COPY

together with (if the Assignor has it) the right to take any proceedings that may be necessary for the recovery of damages or other forms of relief, in respect of an infringement of any of the Intellectual Property Rights and/or the Know how whether taking place before or after the date of this Assignment.

3 **Covenant**

- 3.1 The Assignor covenants with the Assignee that it will at the expense of the Assignee execute, sign and do any instruments, applications, documents, acts and things that may be required by the Assignee to enable the Assignee (or its nominee) to enjoy the full benefit of the property and rights assigned by this Assignment.

4 **Administrators**

- 4.1 The Administrators act solely as agents for the Assignor and neither of them nor their firm or partners shall incur any personal liability whatsoever in respect of any matter referred to in this Agreement and, without prejudice to the generality of the foregoing, in respect of any of the obligations undertaken by the Assignor or in respect of any failure on the part of the Assignor to observe, perform or comply with any such obligations or in relation to any associated arrangements or negotiations whether such liability would arise under the Insolvency Act 1986 or otherwise.

5 **Governing Law**

- 5.1 This Assignment shall be governed by and interpreted in accordance with the laws of England and the parties submit to the exclusive jurisdiction of the English Courts.

This Assignment has been signed on the date appearing above.

SIGNED by the Assignor:



SIGNED by the Assignee:

BEST AVAILABLE COPY

together with (if the Assignor has it) the right to take any proceedings that may be necessary for the recovery of damages or other forms of relief, in respect of an infringement of any of the Intellectual Property Rights and/or the Know how whether taking place before or after the date of this Assignment.

3 Covenant

- 3.1 The Assignor covenants with the Assignee that it will at the expense of the Assignee execute, sign and do any instruments, applications, documents, acts and things that may be required by the Assignee to enable the Assignee (or its nominee) to enjoy the full benefit of the property and rights assigned by this Assignment.

4 Administrators

- 4.1 The Administrators act solely as agents for the Assignor and neither of them nor their firm or partners shall incur any personal liability whatsoever in respect of any matter referred to in this Agreement and, without prejudice to the generality of the foregoing, in respect of any of the obligations undertaken by the Assignor or in respect of any failure on the part of the Assignor to observe, perform or comply with any such obligations or in relation to any associated arrangements or negotiations whether such liability would arise under the Insolvency Act 1986 or otherwise.

5 Governing Law

- 5.1 This Assignment shall be governed by and interpreted in accordance with the laws of England and the parties submit to the exclusive jurisdiction of the English Courts.

This Assignment has been signed on the date appearing above.

SIGNED by the Assignor:

SIGNED by the Assignee:

Ralph Faison

President

Andrew Corporation

511786.3

BEST AVAILABLE COPY

SCHEDULE 1

Patents

- 1 GB2355813 (plus International application and patents in US, Europe, China, Japan and Australia)
- 2 GB2355812 (plus International application and patents in US, Europe, China, Japan and Australia)
- 3 GB2335811 (plus International application and patents in US, Europe, China, Japan and Australia)
- 4 GB2339354 (plus International application and patents in US, Europe and Australia and WIPO patent number WO0002324)
- 5 GB2347031 (plus International application and patents under WIPO and in Australia and Europe)
- 6 GB2347033 (plus International application and patent in Europe)
- 7 9907435.3 (plus International application and patents in Europe and the US)
- 8 GB2348755 (plus International application and patents in US, Europe, China, Japan and Australia and WIPO patent number WO0060732)
- 9 GB2351624 (plus International application and patents in US, Australia and Europe and WIPO patent number WO0103287)
- 10 GB2352570 (plus International application and patents in USA and Australia and WIPO patent number WO0108293)
- 11 GB2354126 (plus International application and patents in US, Europe, China, Japan and Australia and WIPO patent number WO0120775)
- 12 GB2356992 (plus International application and patents in US, Australia and Europe and WIPO patent number WO0141298)
- 13 GB2356993 (plus International application and patents in US, Europe and Australia and WIPO patent number WO0141297)
- 14 GB2358748 (plus International application and patent in Australia and WIPO patent number WO0158011)

BEST AVAILABLE COPY

- 15 GB2359206 (plus International application and patent in Australia and WIPO patent number WO0159923)
- 16 GB2358974 (plus International application and patent in Australia and WIPO patent number WO0158008)
- 17 GB2359432 (plus International application and patent in Australia and WIPO patent number WO0161841)
- 18 GB2359679 (plus International application and patent in Australia and WIPO patent number WO0163744)
- 19 GB2359681 (plus International application and patent in Australia and WIPO patent number WO0163745)
- 20 GB2359666 (plus International application and patent in Australia and WIPO patent number WO0163756)
- 21 0110561.8 (plus International application)
- 22 0110559.2 (plus International application)
- 23 0110563.4 (plus International application)
- 24 0114799.0
- 25 0114804.8
- 26 0114798.2
- 27 0114801.4
- 28 0114803.0
- 29 0212023.6
- 30 0212022.8
- 31 TBA - DPD Additional Signal Processing
- 32 TBA - DPD Additional Signal Processing Control Technique

Trade Marks

- 1 EM1582688 - "APL and device" - (plus applications in US and Japan)
- 2 EM1370147 - "Greenbox and device" - (plus applications in US and Japan)

BEST AVAILABLE COPY